Overview

Scientist. Explorer. Time-Traveler. All of these terms describe a geologist.

As a scientist, you will hypothesize and analyze complex geological processes. You’ll study phenomena such as volcanoes, earthquakes, floods, and glaciers to see how they have given shape to the earth’s great mountains and fertile prairies. Rocks and fossils will give you clues to the locations of natural resources and to the ways in which geoscientists can help society cope with natural disasters.

As an explorer, you participate in field expeditions throughout Tennessee and other regions of North American, plus have the opportunity to travel abroad to experience geologic processes firsthand and where they occur. Field trips to caves, mines, mountains, the coast, and other places will expose you to a world that you have often seen, but may have never truly known.

Through these and other experiences, you will ultimately become a time-traveler and thus see the earth’s grand evolution – past, present, and future.

The Geoscience-Geology degree program is designed to introduce students to the many realms of this essential and dynamic scientific discipline. Whether it be through an introductory course on the geologic history of the earth or a degree-oriented curriculum, undergraduates have the opportunity to learn about concepts, processes, and analytical techniques that have real-world relevance and professional applications.

Career Opportunities

There are many subfields such as oil and gas exploration, environmental geology, paleontology, hydrogeology, geochemistry and geophysics. Geology assumes an increasingly important role in our quest for energy and mineral resources and in our growing concern for the environment. Geologists are typically employed by: private industry such as energy, mining and construction companies; federal government in such agencies as the U.S. Geological Survey, Bureau of Land Management, Bureau of Mines, NASA and the Environmental Protection Agency; state and local governments in state geological surveys, regulatory bodies and regional planning commissions; private consulting firms; academia.

Forbes Magazine ranks geology as the 7th most valuable college major in 2012 out of 120 college majors. Employment growth projections through 2020 from the U.S. Bureau of labor Statistics placed geology within the 15 most valuable majors in the current marketplace.

Facilities

UT Martin has one of the most beautiful campuses in the state. It is comprised of 900 acres of land and instruction is not limited to the campus. Numerous field trips are made to visit the wealth of natural resources in the region. Modern classrooms and laboratories and numerous computer facilities are also available for student use.
B.S. (with a major in Geoscience) - Geology Concentration, minor optional (1162)
Course Requirements for 2018-19 catalog

Fine Arts (3 hours) Select One
ART 110 Understanding Visual Arts ___/3
ARTH 210 The History of Art ___/3
ART 211 The History of Art ___/3
DANC 110 Understanding Dance ___/3
MUS 111 Masterpieces of Music ___/3
MUS 112 Music in Our Time ___/3
MUS 114 Historical Survey of Jazz ___/3
MUS 115 Music for the Masses ___/3
THEA 110 Understanding Theatre ___/3
THEA 111 Understanding Theatre ___/3

Biological & Physical Systems (24 hours)
GEOL 110 Introduction to Physical Geology ___/4
GEOL 120 Environmental Geology ___/4
*Complete two sequences outside of the major
ASTR 201 Astronomy ___/4
& 202 Astronomy ___/4
BIOL 110 Introductory Cell Biology & Genetics ___/4
& 120 Introductory Plant & Animal Biology ___/4
BIOL 130 Foundations of Biology: Ecology & Diversity ___/4
& 140 Foundations of Biology: Cell & Molecular ___/4
CHEM 121 General Chemistry ___/4
& 122 General Chemistry ___/4
PHYS 211 College Physics w/lab ___/4
& 212 College Physics w/lab ___/4
PHYS 220 University Physics ___/4
& 221 University Physics ___/4

Communications (9 hours)
*Students who place in ENGL 100, will use ENGL 110 instead of ENGL 111 in the ENGL sequence.
ENGL 111 English Composition (Must earn a C or better) ___/3
ENGL 112 English Composition (Must earn a C or better) ___/3
COMM 230 Public Speaking ___/3

General Humanities Part A (9 hours)
*Complete a sequence and a course from a different discipline. If 3 courses are taken in 3 different areas, this area could show incorrectly. Please check carefully!
ENGL 250 British Literature ___/3
& 251 British Literature ___/3
ENGL 260 American Literature ___/3
& 261 American Literature ___/3
ENGL 270 World Literature ___/3
& 271 World Literature ___/3
HIST 121 World Civilization I ___/3
& 122 World Civilization II ___/3
HIST 201 History of the U.S. I ___/3
& 202 History of the U.S. II ___/3
PHIL 110 Adventure of Ideas: Historical ___/3
& 120 Adventure of Ideas: Contemporary ___/3
HONR 111 ___/3

General Foreign Language (4 hours)
*Complete a foreign language at 122 level or above. Students who must fulfill a high school deficiency must continue with 222

Social & Behavioral Sciences (6 hours)
*Choose two courses from discipline outside of major
ECON 201 Principles of Macroeconomics ___/3
ECON 202 Principles of Microeconomics ___/3
GEOG 151 Intro to Regional Geography: NA, Europe, Russia ___/3
GEOG 152 Intro to Regional Geography: Asia, Africa, LA ___/3
GEOG 202 Intro to Cultural Geography ___/3
HONR 112 ___/3
PSYC 101 Introduction to Psychology ___/3
SOC 201 General Sociology ___/3

Mathematics (6 hours)
*If both courses taken are MATH 170 or MATH 252, then choose an additional course to satisfy UW GenEd
MATH 185 Pre-calculus ___/5
Or Select Two:
MATH 110 Essentials of Algebra ___/4
or 140 College Algebra & Elementary Functions ___/3
MATH 160 Calculus for Business & Life Sciences ___/3
MATH 170 Trigonometry ___/3
MATH 210 Elementary Statistics & Probability ___/3
MATH 251 Calculus I ___/3
MATH 252 Calculus II ___/3

Geosciences- Geology (37 hours)
*No more than 9 upper-division transfer hours may be used toward a UT Martin degree!
GEOL 210 Methods in Geoscience (Min C grade) ___/2
GEOL 320 Mineralogy (Min C grade) ___/4
GEOL 330 Igneous & Metamorphic Petrology (Min C) ___/4
GEOL 340 History of the Earth (Min C grade) ___/4
GEOL 350 Principles of Paleontology (Min C grade) ___/4
GEOL 360 Sedimentology (Min C grade) ___/3
GEOL 370 Principles of Stratigraphy (Min C grade) ___/2
GEOL 400 Structural Geology (Min C grade) ___/4
GEOL 450 Methods in Field Geology (Min C grade) ___/3

Upper-Division Electives (7 hours in GEOL discipline)

Additional Required Hours (12 hours)
*If student is completing a minor, this area will be replaced once the minor is specified

Geology Major Electives (10 hours)
*Choose enough electives to total 120 degree hours & 42 UD hours
### B.S. (with a major in Geoscience)
**Geoscience – Geology**
**2018-2019**

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